

The
OPEN COURT

Devoted to the Science of Religion,
the Religion of Science, and the Extension
of the Religious Parliament Idea

FOUNDED BY EDWARD C. HEGELER

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LIMITATIONS OF SCIENCE AS A SYSTEM OF BELIEF

BY T. SWANN HARDING

ABSTRACT science and philosophy seem subjects very remote from ordinary life. Actually they are not so at all. Generations of very ordinary men have heroically grappled with the problem of immortality, with that of a personal or impersonal creative intelligence, with that of what we should do now that we are here, and with other metaphysical enigmas about which scientists and philosophers argue in stupendous polysyllables, and about which they actually know almost as little as ordinary people. The invention of an impressive nomenclature has undoubtedly given them a feeling of erudition as a protective cloak, but they know so little that a highly intelligent man was recently heard to declare that the most important problem men faced today was whether life had any definite purpose, whether we have a life after death, and whether there is a god—to lump several closely related problems into one.

Consider this picture. A housewife awoke one morning in her sleeping-porch overlooking the back yard. The apple tree was a mass of white blossoms. The grass had just become thoroughly green. The scent of spring was in the air, and the birds were twittering vociferously. But, just as likely as not, she thought, they were swearing at each other. She should arise. Yet why should she arise? There were two animals, cat and dog, which now imperiously demanded her attention. There were no children who might have constituted a "duty." But would they have been a really important duty? Even they might reach maturity as a negligible clerk or a silly eternal flapper. But she should hang the front room curtains anew and get another china cabinet. Why should she? Having done that there would be that much less to do.

It was not so always. Some years ago, as a trained nurse, she had been kept very busy. She had never meditated on the futility

of her existence in her life, until after marriage gave her leisure. She was happier then than now . . . she was serving. How was she serving? She was helping to save and to preserve human lives. . . . Were they worth preserving—pimply youths and moron flappers? Probably not. Obviously not. The problem seemed involved.

Anyway, she could serve now through her husband. He worked in a laboratory and did what some people called wonderful things. He lectured and he wrote, instructing the people. Yet . . . they were the same kind of more or less useless people she had served when nursing. That was all that service to humanity was; that is all that big reputations of artists, writers, orators, statesmen, are built upon—the ardent devotion of large masses of people whose intellects the great would find individually repulsive and whose habits, customs and ideas would undoubtedly offend them in personal contact. Yet upon their silly plaudits the “great” live. There wasn’t so much to that.

Wasn’t it probable that her husband had an itch to produce an article, or to complete a bit of research, just as she had an itch to purchase a new china closet or to hang new curtains—merely to opiate that curious and indescribable “underneath all” feeling which told you you were old, which told you you were going to die soon, which told you life was a sort of joke, which told you that even the earth would eventually grow cold and lifeless, and that this local jest of sentient life here—a very rare and unusual occurrence at best—would cease, the gods (were there gods?—silly idea) would laugh, and all would be as it had been before chaos became orderly a moment in one of the tinier and least important suburban universes. What could you believe about it all anyway? Why nothing!

So the housewife turned over and went to sleep again and she slept until noon. Then she still felt miserable so she went out and bought a new hat, which gets somewhat outside the territory of metaphysics and does not exactly concern us here. Certain it is that every person with any intellectual pretensions whatever has been prey to these same questionings. That is all that does concern us here.

What we have discovered is, then, that the common individual is no more free from metaphysical ideas than the philosopher and, secondly, that purely rational explanations will not carry as far as certain types of naturalism might led us to think. Husband and

wife both, in very different ways, diverted themselves; in so far as the result was pleasurable to them their lives were successful and that essentially selfish criterion is the only one by which we can really judge. Our activities may be complex and intricate; they may seem to have very considerable significance in a decidedly limited manner, but push any activity to the ultimate limit and you come, as you do in all deeper philosophic thought, to complete skepticism and a conviction of utter futility.

At responsible intellectual levels diversion may well be paramount, for it is socially quite safe to have an intelligent man divert himself as he will. It is assumed, of course, that his emotions as well as his mind are educated; it is freely granted that there exist today hundreds of highly intelligent people whose emotional immaturity renders them socially far more dangerous than morons or near-imbeciles. That is natural because we devote little attention in our educational system to emotional discipline; in fact, to suggest discipline is somehow subtly unpatriotic anyway.

Thus when John Haldane Blackie assayed the American system of education in "Reviewed by a Briton" in *The Educational Review* for October, 1928, he noted that while English students accepted discipline as an unalterable fact of nature, and while their student prefects dared not give cause for rebellion, in America schools have entirely too little discipline. He continued "The American boy at his synthetic worst is conceited, ill-mannered, and without any sense of responsibility." Also, "It is only necessary to compare the police methods of England and America, and the almost total absence of 'graft' in the former . . . to see that discipline is not merely a fad, or a tradition, whose sole merit lies in its whiskers."

At lower intellectual levels, however, the discipline of social regimentation is really necessary because intelligent self-discipline is impossible whether the emotions be mature or not. But Ethelbert Stewart, United States Commissioner of Labor Statistics, recently explained how very useful, socially and economically, the feeble minded can become when handled intelligently (*Monthly Labor Review*, July, 1928). This again involves scientifically controlled discipline by social pressure such as prevails, it is reliably reported, in the new schools of Soviet Russia, where the idea of beating up a student to make him obey has become actually grotesque. This discipline should always be accompanied by interesting and time-consuming tasks and fixed beliefs. It is especially the lack of the

latter these modern days that has done so much to upset our civilization and give it a criminally chaotic aspect. Intellect is no more radical than it has always been, but lower levels of intelligence have hitherto been shielded from these strong mental brews, perfectly safe to quench the thirst of strong minds, by the fact that they have been uneducated and largely inarticulate.

This is an era of free education. The conquest of illiteracy is our high ideal. Whether or not minds and emotions are disciplined, every one must be able to read and write, and this leads to vehement articulation on the part of classes unaccustomed to be articulate in the past. The always dubious and skeptical ideas of the true intelligentsia also much more rapidly filter down to lower levels today than in the past; it is then assumed at those levels that the organized world has gone to the dogs—for though these radical beliefs are centuries old, they have never before been so clearly apprehended by those of moderate intelligence; therefore the old, fixed, traditional beliefs of the masses are no longer respected by them, and we have the widespread criminality and disrespect for social stability now rampant as a very natural consequence.

The true intellectual of culture can safely have fluid beliefs; he can be very skeptical, because such people have the personal sense of values to know that hypothetical beliefs should not control their actions; when they act they follow facts, whatever their momentary beliefs. On lower levels of intelligence, however, beliefs actually do condition acts. The only way out is, then, for the intellectual minority to condition the beliefs of the masses in such a way that they can act upon their beliefs to the greatest good of society as a whole. The ordinary man can not be skeptical and entertain fluid beliefs or indulge in suspended judgment without becoming absolutely unreliable as a citizen.

The true intellectual, like the great scientist for instance, can entertain these fluid beliefs which, like the fundamentals underlying science as well as religion, rest ultimately upon absolutely nothing, save a common assumption accepted as axiomatic, just as he accepts the polite conventions of society or the more delicate nuances of etiquette. He knows that his ultimate beliefs do not require proof, though he may have considerable faith in the temporary logical structure he rears upon them. This structure is a product of pure rationalism, a rationalism more pure than it is possible to use in the

construction of any religion, yet, like religion, it rests finally upon pre-rational or non-rational assumptions.

These beliefs of the true intellectual, then, rest ultimately upon nothing save an assumption. This assumption does not require proof; it is accepted as axiomatic. It is like those propositions early in Euclid upon which the entire fascinating structure of his logical geometry is built. It just *is*—whether it be Creator or Unknowable, Creative Intelligence or the Law of Universal Causation; whether God or Absolute, it just *is*. It may momentarily, and in a specific emotional state, appear to be supported by an astute selection of apposite facts, but that is all you can say for it, and the true intellectual may be assayed by the fact that he actually knows when he has begun to rationalize *ex post facto* in order to buttress a belief he finds comfortable *per se*.

On the other hand, as we have seen, the masses vastly need discipline today. In the pursuit of the democratic ideal we have gone too far. It is quite true that the sort of discipline the nobility and royalty of one or two centuries past exacted from the masses had grown obsolete. It needed to be discarded. But the extreme democratic idea, the idea that one man is as good as another and, if poor and hard-working enough, a great deal better, has led the world to assume that no discipline at all is necessary. Yet during these very years science was rising to offer the newer and better discipline the intellectual minority should apply to the masses. However, it has remained rather well secluded in laboratories and behind walls even until today, and mass discipline is still attacked, if at all, with the anachronistic weapons of antiquated creeds, exploded philosophic notions and traditional moral concepts.

What the masses need today is a system of metaphysical beliefs which trained biologists and psychologists could certainly fashion for them. Science is recreant to its plain duty to society until such an attempt is made, and it will well deserve the antagonism of, and perhaps ultimate annihilation by, ignorant mass notions unless it girds itself to attack this problem. It is well enough to know the finer points of therapy or nutrition and to be involved in long researches upon lower animals, but the most important problem confronting science is that of so controlling society, the great mass of men, that science may pursue its humane studies and apply them to that society without disastrous interference from the very people it desires to help. This means simply that the paramount duty of

science is to fashion beliefs for the masses and to discipline them into these beliefs so that ordinary men may again attack tasks commensurate with their intelligence, while resting in the protection and the sharp discipline of beliefs they can accept as final. Scientists can then also pursue their researches unmolested by recalcitrant mass values.

This new mass religion cannot be Science itself, however much the masses appear today to want to make it Science. Quite ordinary people today set up Science as a criterion of value even in religion: if it can be made to support a religious idea, that idea becomes more true; if not, the idea is weakened or Science must change, which is unfortunate for Science. Modern advertising and reading matter in the popular magazines make it more and more apparent that Science does tend to become the "New Messiah" for laymen in general. But it will really not do at all. It will not do because it admits, privately at least, that it rests ultimately upon purely non-rational assumptions which just are. A religion may be very logical in its superstructure but it never admits that its foundation is non-rational; its foundation is super-rational because laid by Omniscience and Omnipotence and that is essential to religion. Science says, well here we are at the foundation; it just is; let us build up a beautiful edifice. Religion says here is the unchanging foundation which God, the Omniscient, has ordained as perfect and absolute from everlasting to everlasting; let us build upon it this or that pretty edifice; whatever it may become in the end the foundation is sure and absolutely final.

Science is, of course, merely a system of belief expressed dogmatically, but it is a system of belief for the intellectual minority, not for the masses. It differs from religion solely in its attitude towards its ultimate principles, but those principles remain simply assumptions, like the religious assumptions. Science, however, admits they are assumptions; it does not affect to regard them as final revelations. Science assumes, for instance, that if we observe and experiment we can find nature's laws by summarizing enough particulars. That is an assumption. For observation and experiment have certainly produced as many false as true beliefs. We could never prove that that assumption is rationally sound. It just is and from that science proceeds on its way. In similar manner it assumes universal causation and regularity of performance in natural law. In its assumptions about cause and effect it is up against a non-

rational principle which just *is* in the universe, and in its adoration of consistency and regularity of nature's performance—the idea that the sun will arise tomorrow because it did yesterday and that a miracle cannot happen because of nature's law—it is simply making further assumptions.

A comedian sitting at the piano once said, "I will now play this piece just as Paderewski would play it if he played it just as I am going to play it," and that is somewhat the standpoint of science. We see the moon and it is the "real" moon which has sent its rays to our retinas; quite so, but why? We see a ghost just as surely and yet it is not a ghost; it may have sent its rays to our retinas surely enough but it is not a ghost because science says there is no such thing as a ghost. We must continually make such assumptions. We may say likewise that Christ, and twelve or fourteen saints after him, did not make water into wine because science says (uniformity of the operation of nature's laws) this cannot be done. Yet science devised these laws by summarizing particular phenomena; it does not even pretend to be able to prove any law absolutely because it is utterly impossible for it to ascertain every single particular in any single case. Why not allow for a miracle here or there, among the unsummarized particulars? There is no rational reason. It just isn't done. Science is dogmatic about such things.

Why not a Creator as well as a Universal First Cause or an Unknowable? There is no real reason. Science simply does not make use of that assumption nor does it need that assumption in its work. What is the essential utility of the doctrine of the uniformity of natural law other than as a club for a theologian's head when he appears with a miracle in his hand? Why is empirical knowledge drawn from observation and experience of more value than intuitive knowledge which just comes to us and tells us it is Truth? There is no *real* reason for these things. Science simply agrees to accept and be guided by the one and to reject the other as unreliable. And, in the intellectual system of belief called Science (the true intellectuals of today tend more and more to hold this belief in its best form) intuitive knowledge is not needed very much.

There is some confusion, of course, when the physicist meets the psychologist and the former says "All is mechanical cause and effect," to which the latter replies "All is the subjective action of

our minds upon what appear to be external phenomena." But it is possible to fuse even such divergences into a sort of oneness for study as a whole, especially these days when physics becomes more and more amenable to mental moulding. For Lord Haldane's final article in *The Century* for December, 1928, said this, among other things: that Einstein has taught us time and space are ultimately nothing more than relations established between the mind and the things it observes, and that these relations vary according to the velocity of the observing mind. Hence we are driven back to mind even in physics; outside mind there is nothing, and apart from it, nothing has any meaning.

Why, we may ask for example, a theory of evolution? "Well, it rests upon scientific method, upon observation and experience." Upon what do these rest? O you must assume something. But observation and experience, even in the theory of evolution, have now and then produced wrong ideas or beliefs, have they not? "O yes, of course." Then which of your present beliefs are incorrect? "It is really impossible to say just which may be found wholly or in part erroneous after further investigation, but we certainly believe that progress will finally round the theory into a completely acceptable and true doctrine, and we hold just as certainly that the scientific method will lead us rightly in the future as in the past." But you have admitted that your fundamental assumptions are just assumptions, they do not rest upon scientific method, then. You have admitted that this scientific method has at times produced erroneous beliefs in your restricted field. How do you know that your dependence upon scientific method and your belief in progress are not among the erroneous beliefs? "Well, we have no reason to think so and, as I said, we must assume something." All right; assume that your theory of evolution has become an absolutely true thing, then what? It is then an absolute doctrine in which every one must believe. It no longer rests upon facts, phenomena, observation, experience, or scientific method; it just *is*: it is an axiom and has wiped away its foundation in becoming the perfect thing you hoped progress would make it. What then?

Logically and rationally there is nothing then. The theory of evolution like all other scientific theories is vulnerable to such basic rational treatment. Ultimately it just is. Science offers a fine, logical, useful system of belief; it has especial attraction for people of active intellects and self-disciplined emotions. It suits them as

a more metaphysical or religious system of belief never could, and it also has more practical utility than such systems. But it is nothing more nor less than another system of belief founded upon certain fundamental assumptions, and to claim more for it, is to assume an arrogance no scientist should ever assume.

Coming back to where we started, then, we each and every one of us adopt a scale of values and a system of belief that seems comfortable to us. We essentially believe what it makes us feel good to believe and we indulge in those activities which most completely satisfy us. Despite our pretenses that is the real fact of the matter. These particular beliefs somehow protect us as individuals from the awfulness of complete doubt or intellectual chaos. They give us something to tie to, some point at which to start, some foundation upon which to rear a dwelling for our minds. They save us from a sense of utter futility. For we all have orderly minds in a frightfully disorderly universe and the only order the universe has is that with which our minds invest it. If we want a section of the universe pleasingly orderly we must synthesize this order mentally. It is in some such sense that Santayana meant that miracles had more reason than scientific laws, for they implied the very humanly comprehensible and reasonable desire of a beneficent father-god to see that we, his children, were protected and aided, whereas indifferent natural law simply was. What Santayana forgot was that God simply is also, if you place him as your foundation instead of some other non-rational assumption.

A system of social order should then be planned by those who think, and it should be planned so attractively that the beliefs evolved above (speaking intellectually now) for those below will discipline those below, while at the same time giving them the feeling of free will and independence. This means that culture and humanism must be added to science; that Goethe and Shakespeare and Beethoven must take their places beside Newton, Kelvin and Einstein. Science must learn to see life wholly; to temper its most cherished beliefs with a tinge of skepticism, to seek diversion and content rather than certitude and finality, and so to control minds of the lower intellectual orders that their discipline may make our entire society more happy and more stable than it is at present.